

Appl. No. 09/915,967
Amdt. Dated November 7, 2005
Reply to Office action of August 5, 2005
Attorney Docket No. P12616-US1
EUS/J/P/05-3278

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of routing call data in a mobile communications system between two mobile switching centers (MSCs) switching points, comprising the steps of:

~~receiving said call data from a source switching point, at an IP gateway from an associated source MSC via a trunk circuit; having at least one trunk circuit connecting said gateway to said source switching point, said call data transferred on one of said trunk circuits;~~

~~packetizing said call data at said IP gateway to format said call data into one or more data packets suitable for transmission over an IP network;~~

~~determining the identity of the trunk circuit;~~

~~assigning attaching an IP destination address to said packetized call data packet data representing a destination MSC associated with the trunk circuit;~~

~~based on which said trunk circuit said call data was received by said IP gateway attaching a source address identifying the source MSC; and~~

~~transmitting said packets over an IP network to the destination MSC, a destination switching point.~~

2. (Currently Amended) The method of claim 1, further comprising:

~~receiving one or more data packets from an IP network at an IP gateway connected to the destination MSC a destination switching point by at least one trunk circuit;~~

~~assembling said call data from said received data packets;~~

~~directing said call data to one of said trunk circuits based on [[a]] the source IP address associated with said data packets; and~~

~~transferring said call data to the destination MSC said destination switching point.~~

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3. (Currently Amended) The method of claim 1, wherein said at least one trunk circuit connecting said gateway to the source MSC ~~said source switching point~~ comprises a plurality of trunk circuits ~~connecting said gateway to said source switching point~~.

4. (Currently Amended) A method of routing call data between two ~~switching points~~, mobile switching centers (MSCs) in a mobile communications system, comprising the steps of:

receiving one or more data packets from an IP network at an IP destination gateway connected to a destination MSC switching point by at least one trunk circuit;

assembling said call data from said received data packets;

directing said call data to a particular one of said trunk circuits, wherein the identity of the particular one of said trunk circuits is based on a source IP address associated with said data packets; and

transferring said call data to said destination MSC via said particular one of said trunk circuits ~~switching point~~.

5. (Currently Amended) A method of routing mobile communication system call data through an IP network, comprising:

transmitting call data from a source mobile switching center (MSC) switching point to an IP source gateway on ~~one of~~ at least one trunk circuit connecting said source MSC switching point to said IP source gateway;

packetizing said call data at said IP source gateway ~~to format said call data into one or more data packets suitable for transmission over the~~ an IP network;

determining the identity of the at least one trunk circuit;

assigning attaching an IP destination address to said data packets at said IP source gateway, said IP destination address representing a destination MSC associated with the at least one trunk circuit ~~to said data packets at said IP gateway based on~~

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~~which of said trunk circuits said call data was transferred from said switching point to said IP gateway;~~

assigning attaching an IP source address, associated with said IP source gateway to all said data packets, ~~wherein said IP source address is associated with said IP gateway;~~ and

transmitting said data packets over the an IP network.

6. (Currently Amended) The method of claim 5 ~~[[4]]~~, further comprising:
receiving one or more data packets from said IP network at an the IP destination gateway connected to ~~[[a]] the destination MSC-switching point by a destination end of the~~ at least one trunk circuit;

assembling said call data from said data packets;

directing said call data to one of said trunk circuits that is selected based on an IP source address associated with said data packets; and

transmitting said call data from said IP destination gateway to the destination MSC via the destination end of the at least one trunk circuit ~~a destination switching point.~~

7. (Currently Amended) The method of claim 5 ~~[[4]]~~, wherein said destination end of the at least one trunk circuit connecting said destination MSC switching point to said IP destination gateway comprises a plurality of trunk circuits ~~connecting said switching point to said IP gateway.~~

8. (Currently Amended) A method of routing mobile communications system call data through an IP network, comprising:

receiving one or more data packets from said IP network at an IP destination gateway connected to a destination mobile switching center (MSC) switching point by at least one trunk circuit;

assembling said call data from said data packets;

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directing said call data to one of said trunk circuits, wherein identity of the one of said at least one trunk circuits is based on an IP source address associated with said data packets; and

transmitting said call data from said IP destination gateway to said destination MSC switching point.

9. (Currently Amended) An IP gateway for providing to provide virtual circuits-trunks for routing call data between mobile switching centers (MSCs) switching points in a mobile communications system, comprising:

at least one trunk circuit connected between the IP gateway and a MSC to a switching point in said mobile communications system, said at least one trunk circuit carrying said call data;

an IP interface connected to an IP network;

a data packetizer for packetizing said packetizer to packetize call data received by said IP gateway on said trunk circuits into one or more data packets suitable for transmission over said IP network; and

means for attaching the IP gateway address and an IP address generator to generate an IP destination address to for said data packets, wherein said IP destination address is based on the identity of said at least one trunk circuit, based on which of said at least one trunk circuit said call data was received from said switching point by said IP gateway.

10. (Currently Amended) The IP gateway of claim 9 [[7]], further comprising:

a data depacketizer to assemble data packets received from said IP network into mobile communications system call data; and

a demultiplexer directing said call data to a particular one of said at least one trunk circuits, wherein the identity of the particular one of said at least one trunk circuits is identified by based on an IP source address associated with said data packets.

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11. (Currently Amended) The IP gateway of claim 7, wherein said at least one trunk circuit connected to the MSC ~~a switching point~~ comprises a plurality of trunk circuits ~~connected to said switching point~~.

12. (Canceled)